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ABSTRACT

An evaluation of a statewide dropout prevention strategy program with 13 prevention projects conducted by the Louisiana State Department of Education in the 1988-89 school year is presented. Both summative and process evaluations are described. The attitudes of 831 10th-grade students were measured using a pretest and posttest attitude survey developed by P. Prestholdt (1986). Analysis of data from 11 of the projects constituted the summative aspect of the evaluation. Site monitors reviewed documents; observed classes; and interviewed school administrators, teachers, and students. Four of the programs demonstrated significant positive effects, while two indicated significant negative effects; one of these had such a large standard error of the mean than some testing irregularities appeared to have occurred. Process evaluation was conducted in these four projects that showed significant improvement: (1) a computer-assisted intervention project for potential dropouts; (2) a project focusing on training teachers and administrators in dropout prevention; (3) an integrated educational and social service delivery system to assist the city in dropout prevention efforts; and (4) an interactive instructional program combining the use of microcomputers and videodiscs to improve reading and writing skills of high-risk youth. Three tables present data from the studies. (SLD)

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Statewide School Dropout Identification and Strategy Development Program: Does It Work?

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The purpose of this paper is to present an evaluation of a statewide dropout prevention strategy program conducted by the Louisiana Department of Education in school year 1988-89. Altogether 13 dropout prevention projects were operationalized during that school year for a total of $550,000. This paper will present both a summative evaluation based on pre- and post-test scores on an intention to dropout instrument and process evaluations of the more successful programs.

One of the major problems facing educational administrators at both the state and national levels is that of a high dropout rate. While this high dropout level is well-documented at the national level (Cibulka, 1986; Hargroves, 1987; Hess, 1986; Lefkowitz, 1985), the problem is particularly acute in Louisiana. The Louisiana Department of Education (1986) indicates that only 59.4 percent of the total number of ninth graders in Louisiana during the 1981-82 school year graduated with their senior class in 1984-85. The last six Annual Reports of the Louisiana Department of Education (i.e., Louisiana Department of Education, 1986) have included tables comparing national and state retention rates, indicating that Louisiana has consistently graduated 11 to 13 percent fewer of its' ninth grade students than are graduated nationally (Teddlie, Cleveland, Abatena, and Desselle, 1988).

In a comprehensive review of the literature, Howard and Anderson (1978) concluded that dropping out is a complex behavior with multiple causes. These often cited causes (Archer and Dresden, 1987; Camp, 1980; Schreiber, 1969; Timberlake, 1980) for dropping out include: socioeconomic status, poor grades, parents' level of education, being retained at grade level, excessive absences, generally low academic ability and poor minimum competency test results. Although researchers can point to a variety of general causal influences that impact the decision to drop out, it is much more difficult to determine why a particular student drops out at a particular time. There appear to be, however, certain types of individuals who are more prone to drop out than others. Examination of the profiles of these individuals indicates that they vary considerably in terms of race, sex, and urban/rural background (Prestholdt, 1986).

Class-cultural differences are quite often cited for differences between dropout rates in slum and suburban schools (Banfield, 1974). Timberlake's (1980) review of the dropout literature indicated that cultural deprivation was the most commonly agreed upon reason for dropping out. Some authors suggest that schools may not be the best venue for lower socioeconomic status students who are oriented toward present, rather than future, gratification.

In 1982, the Louisiana Board of Regents commissioned a research project (Prestholdt, 1986) to study the Louisiana dropout problem, and Prestholdt described the research as an attempt to develop a decision model for identifying and understanding the decision to stay in or drop out of school. This approach was based on the Theory of Reasoned Action developed by Fishbein and Ajzen (1975). The study focused on identifying a broad range of variables which may influence the decision to stay in or drop out of school and to determine how they may influence such a decision.

A questionnaire was developed and administered to tenth grade students in nine randomly selected high schools from across the state. The final questionnaire included a comprehensive set of questions which covered the students' attitudes and beliefs, the social pressures on them, and their demographic characteristics. Analysis of the data indicated that about 21 percent of the sample had some likelihood of dropping out.

Prestholdt's (1986) findings indicated that the decision to leave or stay in school was largely influenced by the individual student's attitudes and beliefs and the perceived normative social influences placed upon them by significant others. Of the two, the student's attitudes and beliefs were found to be more important than the perceived social pressure. The study

described in this paper is partially a follow up to Prestholdt's research, since the pre- and post-test scores are based on responses to a modified version of his questionnaire.

Method

The Louisiana statewide dropout prevention program was designed as a pilot study for initiating a comprehensive dropout program in the state. A competitive bid process was set up whereby $550,000 in grant awards were allocated for dropout projects. Forty-three proposals were submitted, and thirteen projects were selected.

Several reports (i.e., American Association of School Administrators, 1979; Mann, 1985; Titone, 1983) have noted strategies for preventing students from dropping out of high school. Mann (1985) suggested five school practices that might help retain students: (1) pupil progress systems; (2) targeted services for at-risk students; (3) smaller programs characterized by care and concern; (4) a better linkage between education and employment; and (5) more basic skills focus. Aspects of these program practices are found in various portions of the thirteen projects funded in Louisiana.

The evaluation of the project was both process and product oriented. The process evaluation phase focused on assessing the appropriateness of the procedures

employed in the development and implementation of the various activities in the 13 projects. The product evaluation component focused on assessing the impact of the projects on the students initially identified as potential dropouts through the 13 pilot programs in the Fall 1988. Members of the project team conducted onsite monitoring visits and project personnel completed midyear and final evaluation reports.

Student attitudes were measured using a pre- and post-attitude survey developed by Prestholdt (1986). Data were analyzed using t-tests which compared the pre-test and the post-test scores of the participants. Analysis of the pre-test and post-test data constituted the product oriented aspect of the evaluation. The overall evaluation activities are described in Table 1.

Results of the Product Evaluation

There were five separate subscales on the modified Prestholdt survey (MPS): (1) six items measuring social pressure by different significant others on the student to stay in or drop out of school; (2) nine items measuring the students' evaluations of the consequences of staying in or dropping out; (3) fourteen items assessing the students' beliefs about the likelihood of the consequences of staying in or dropping out of school occurring; (3) six items assessing the students' motivation to comply with social pressure; and (5) four

measures of the internal/external psychological orientation of the students.

Average scores for students on these five subscales were constructed for the Fall 1988 and Spring 1989 testing dates. The items were recoded so that larger scores indicated more positive beliefs, attitudes, or intentions toward staying in school. Thus, a larger number on the post-test than on the pre-test would indicate a more positive attitude toward staying in school after the institution of the dropout prevention program. Altogether 831 students from the 13 projects were matched on pre- and post-test.

Means, standard errors of the mean, and *t*-test values across all subjects are presented in Table 2. All changes from pre-test to post-test values were in the positive direction. There was one significant effect and one marginally significant effect across all program participants: (1) after going through the dropout prevention program, students were more likely to believe that the positive consequences of staying in school and the negative consequences of dropping out would indeed occur [$t(831)=2.33, p<.05$]; (2) at post-test time, students were more likely to evaluate the consequences of staying in school as positive and the consequences of dropping out as negative than they were at pre-test time [$t(831)=1.85, p<.07$].

Of the thirteen programs, eleven reported pre-and post-test data while two did not. One program director did not want to assess student attitudes, while another program director did not administer the pre-test until well after the program had started. Table 3 presents the number of observations, means, standard errors of the mean, and *t*-test values for the eleven programs on the two subscales on which there was significant or marginally significant overall program effects.

Four of the programs demonstrated significant positive effects (#2,9,10,11), while two indicated significant negative effects (#3,4). It is difficult to explain the negative effects, although one program (#3) had such a large standard error of the mean that some testing irregularities appear to have occurred.

Results of the Process Evaluation

The four projects which showed significant improvement from pre-test to post-test were: (1) Project #10-Louisiana State University project entitled Developing Critical Thinking Skills: A Computer-Assisted Intervention Program for At-Risk Students (CATS); (2) Project #4-Northeast Louisiana University project entitled Dropout Identification and Prevention Program; (3) Project #11-Greater Baton Rouge Boys Club project entitled Cities in Schools; and (4) #9-St. Tammany Parish project entitled Principles of Alphabetic

Literacy System (PALS). Each of these four projects will be briefly described. Table 4 includes the data sources for the process evaluation.

The LSU CATS project provided both inservice training for teachers and a critical thinking skills curriculum for at-risk students. The curriculum consisted of computer-based activities designed to teach critical thinking skills in the social studies, science, and mathematics curricula. During the fall semester, the project was devoted to the development of the curriculum, the creation of curriculum guides and materials, and the acquisition of appropriate instructional software. In addition, the inservice training of teachers was conducted as planned. The pre-test instruments for assessment of self-esteem, critical thinking ability, and academic achievement were administered to students in both the experimental and control group before the project began to provide instruction. During the spring semester, the curriculum was implemented. Students were engaged for at least three hours per week per content area in computer-based learning activities.

The site monitor reviewed documents, observed classes in progress, and interviewed school administrators, teachers, and students at both project sites. Several students reported grade improvements during the project. The principals and teachers were

enthusiastic and felt the project was beneficial to the students. One cited an occasion of observing ordinarily passive and/or hostile at-risk students participating with enthusiasm in a project activity. The evaluation design was cited as a project strength by the monitor.

The Northeast Louisiana University Dropout Identification and Intervention Project is based on the premise that the school environment needs to improve in order to change the attitude of students toward school. In order to facilitate this improvement, participating teachers and administrators were given specialized inservice training in how to treat (talk to, relate to, react to) the students who have been identified as potential dropouts. The project director and his staff developed 16 Program Items that teachers must use in working with students who are identified as potential dropouts. The research design was an experimental design that aimed to compare the performance and attitude of students who had worked with the project-trained teachers with those who had not.

On-site monitor observations confirmed that the program components as described in the proposal for project funding were in place and that appropriate instrumentation and records for assessment of outcomes were available. Interviews with administrators, teachers, and students evidenced excellent rapport,

opinions that significant progress had been achieved toward project objectives, and enthusiastic expressions of desire to have the project continued.

The Greater Baton Rouge Cities in Schools is part of a national dropout prevention program, the main purpose of which is to assist cities in reorganizing their existing human development resources around coordinated, personalized, and accountable intervention systems for dropout-prone youth.

The Cities in Schools program is an integrated educational and social service delivery system based on the following fundamental concepts: (1) The creation of working partnerships between the public and private sector for governing and funding the delivery system; (2) The use of the school as the focal point of integrated service delivery; (3) The use of re-positioned staff from existing human service agencies and volunteer organizations; and (4) The development of coordinating structures built around small, accountable and personalized delivery units of multidisciplinary teams dedicated to addressing problems holistically.

While agency partnerships are based on specific needs in specific situations, a typical team may include professional staff from both the school and other agencies such as Aid to Families of Dependent Children, Child and Family Counseling, Parks and Recreation, Family

Planning/Child Development, Juvenile Justice and/or Family Health Agencies. The parental involvement component includes systematic contacts and invitations to participate in CIS activities.

The site monitor verified records, observed on-site activities, and interviewed central office and school administrators, teachers, and students. The interviewees were uniformly supportive of the program. Each interviewer recommended project continuation and expressed the belief that the project was beneficial to the participants. Continued "networking" with other in-state and national office CIS staff, as recommended by the project director, should be of value in the continuation of the first year's achievements of the Greater Baton Rouge CIS project.

The St. Tammany PALS project is an interactive instructional program that combines the power of micro-computers with the speed and image-storing capacity of videodiscs to teach functionally illiterate adolescents how to read and write using a phonemically based system. The students targeted for this project were reading and writing at or below a fifth grade competency level and were enrolled in English II classes. As many as five students per class were served one hour per day for five periods daily during a regular semester.

The PAL System is divided into three phases. During

the first phase, students viewed a story about the invention of the alphabet and learned how to touch type. During the second phase of the course, students were tutored by the Info Window Courseware and discovered that sounds, represented by letters of the alphabet, are used to write words and sentences. The third phase of the course emphasizes personal writing. Students were encouraged to write phonemically (the way words sound) as they began the process of putting words on paper. At the end of the third phase, students produced personal resumes and completed job application forms.

Interviews conducted by the site monitor with the parish superintendent, the school principal, the teacher aide responsible for supervision of the computer laboratory, teachers from whose classes were pulled, and several PALS students elicited evidence that the project was understood, that it was being appropriately administered, that persons involved believed progress was being made toward project objectives, and that each of the categories of interviewees recommended project continuation. The final reported attainment of the project objectives is noteworthy.

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Table One

EVALUATION ACTIVITIES

EVALUATION OF PROJECT PROPOSALS
REPORTS OF STUDENT SELECTION CRITERIA
DETAILED INFORMATION ABOUT STAFF, PROGRAM COMPONENTS, STUDENTS AND INTERNAL EVALUATION PLANS
ON-SITE MONITORING
ADMINISTRATION AND ANALYSIS OF PRE- AND POST-TEST ATTITUDE SURVEY
REVIEW OF PROJECT REPORTS

Table Two

Difference Scores Across All Program Participants on the Five MPS Subscales

Subscale	Number of Participants	Mean Difference Between-Pre-test and Post-test Scores	Standard Error of the Mean	*t*-value
Social Pressure to Stay In or Dropout of School	831	.47	.35	1.35
Evaluation of the Consequences of Staying In or Dropping Out	831	.87	.47	1.85*
Likelihood of the Consequences Occurring	831	1.75	.47	2.23**
Motivation to Comply with Social Pressure	831	.18	.39	0.47
Internal/External Orientation	831	.02	.29	0.08

Note: A positive mean indicates higher post-test than pre-test scores. Positive scores indicates positive program effects.

*$p < .10$
**$p < .05$

Table Three

Difference Scores Across Individual Programs on Scales Measuring the Evaluation and the Likelihood of Consequences of Staying In or Dropping Out of School

Program Number	Subscale	N of Observations	Mean Difference Between Pre-test and Post-test Score	Standard error of the mean	t-value
1	Evaluation	114	.47	1.12	0.42
	Likelihood		1.79	1.86	0.96
2	Evaluation	145	1.18	.96	1.23
	Likelihood		3.02	1.76	1.72*
3	Evaluation	21	-12.29	4.67	-2.63**
	Likelihood		-14.48	8.90	-1.63
4	Evaluation	85	- 2.66	1.52	-1.75*
	Likelihood		- 5.80	2.48	-2.34**
5	Evaluation	111	.25	0.53	0.47
	Likelihood		.96	1.21	0.80
6	Evaluation	77	1.34	1.43	0.94
	Likelihood		2.77	2.80	0.99
7	Evaluation	29	- 1.00	2.10	-0.48
	Likelihood		1.00	4.03	0.25
8	Evaluation	74	1.53	1.75	0.87
	Likelihood		- 1.17	2.37	-0.50
9	Evaluation	7	4.14	1.60	2.60**
	Likelihood		4.57	3.96	1.15
10	Evaluation	145	8.44	1.51	2.94***
	Likelihood		8.55	2.26	3.79****
11	Evaluation	23	3.91	0.93	4.20****
	Likelihood		3.22	3.33	0.97

Note: A positive mean indicates higher post-test than pre-test scores. Positive scores indicate positive program effects.
* $p < .10$; ** $p < .05$; *** $p < .01$; **** $p < .001$

Table Four

Data Sources For The Process Evaluations

Project Request For Proposals
Project Proposals
Proposal Descriptions
Proposal Evaluation Instrument and Reports
Project Description Survey
Project Site Visit Reports
Project Reports:
(1) Student Selection Criteria and Methods
(2) Budget
(3) Change Analysis
(4) Objectives Attainment